## LLM-as-a-Judge LLM-as-a-Judge Bradley-Terry Model (Parallerl Decoding) (Simple Test-Time Scaling) Name three ways to extend the Name three ways to extend the Name three ways to extend the battery life of a laptop battery life of a laptop battery life of a laptop Question Question Question Br Answer B **BRAnswer B** Answer B Answer A Answer A Answer A Three ways to extend Limiting the usage of Limiting the usage of Limiting the usage of Three ways to extend Three ways to extend the battery life of a the battery life of a I the battery life of a the laptop, enabling I the laptop, enabling the laptop, enabling laptop are: [Omitted...] laptop are: [Omitted...] laptop are: [Omitted...] I all power-saving all power-saving all power-saving 4. Update the laptop's 4. Update the laptop's 4. Update the laptop's settings, and using a settings, and using a settings, and using a operating system and operating system and recommended power operating system and recommended power recommended power software. software. bank. Isoftware. bank. bank. Judgement 1.1 Judgement 1 [Omitted...] Answer Sample Multiple Judgements tour points instead of B maybe not as three. specific as Answer l A's suggestions. Judgement 1.2 Scalar: Scalar: Okay, let's Okay, let's start Sure! Let's start Final Answer: Answer A provides more detailed | compare Answer | with evaluating by looking at and actionable methods but includes four points 0.6 Omitted...). [Omitted...]. A and Answer B I instead of three, violating the instruction. Thus, final (verdict is [[B]]. [[Omitted...] Therefor, Answer IAnswer A is lA is Better. Better. Thus, answer A lis Better. Advantage: 1. Sample friendly 2. Traces of interpretability Drawback: Drawback: Drawback: 1. Current llm-as-a-judge do not present 1. Lack of interpretibility 1. Homogeneity across sampled answers this intrinsic reflection capability 2. Sample inefficiency 2. Inference time unscalable

Answer A has